

Abstract of the Disclosure

A capacitive sensor configuration is capable of determining position and/or velocity for rotary or linear translation using a movable dielectric element coupled to an elongate member. The dielectric element is supported between at least one detection plate and a plurality of transmitting plates. By measuring the charge on the detecting plate, the capacitances of the assembly at a given point in time can be determined, and this measurement is used to solve for position of the member. The dielectric need not be rigid, and the dielectric's distance from the plates does not have to be tightly controlled. The apparatus can be used to measure the position or velocity of a variety of devices, including computer peripherals such as mice, keyboards, joysticks, and other input control panels and pointing devices.